

IN THE CLAIMS:

Please cancel claims 1-7, amend claims 8-15, and add claims 16 and 17 as follows.

1-7 (Canceled)

8. (Currently amended) Sample observation method ~~characterized by~~
comprising steps of:
acquiring a reference sample image not including any defect on a sample
~~by capturing an image of the sample with an imager,~~ based on the information on a defect
~~developed~~ on the sample and detected by an inspection apparatus;
moving the sample in a viewing field of the imager and acquiring a
defective sample image including the defect on the sample ~~by capturing a image of the~~
~~sample at a first scale factor with the imager,~~ based on the information on the defect
~~developed~~ on the sample and detected by the inspection apparatus;
locating the defect on the defective sample image by comparing the
reference sample image and the defective sample image;
~~capturing~~ acquiring a magnified view of the local area where image of the
located defect ~~exists within the area whose view has been captured as the defective~~
~~sample image, thus acquiring a magnified image of the defect at a second scale factor~~
greater than the first scale factor with the imager without moving the sample; and
displaying the magnified image of the defect on a screen.

9. (Currently amended) Sample observation method ~~characterized by~~
comprising the steps of:
acquiring a reference sample image not including any defect on a sample
~~by capturing an image of the sample with an imager,~~ based on the information on a defect
~~developed~~ on the sample and detected by an inspection apparatus;

6 adjusting the a position of the sample so that the defect will fall within the
7 field of view of ~~image capture~~ said imager, based on the information ~~on the defect~~
8 ~~developed on the sample and detected by the inspection apparatus;~~

9 acquiring a defective sample image including the defect on the sample ~~by~~
10 ~~capturing an image of the sample in the adjusted position~~ at a first scale factor by said
11 imager;

12 locating the defect on the defective sample image by comparing the
13 reference sample image and the defective sample image;

14 ~~capturing~~ acquiring a magnified view of the local area where image of the
15 ~~located defect exists within the field view of image capture, thus acquiring a magnified~~
16 image of the defect at a second scale factor greater than the first scale factor with said
17 imager without changing the position of the sample; and

18 displaying the magnified image of the defect on a screen.

1 10. (Currently amended) Sample observation method ~~characterized by~~
2 according to claim 9 further comprising, subsequent to the step of acquiring a magnified
3 image, a step of:

4 ~~acquiring a reference sample image not including any defect on a sample~~
5 ~~by capturing an image of the sample, based on the information on a defect developed on~~
6 ~~the sample and detected by an inspection apparatus;~~

7 ~~acquiring a defective sample image including the defect on the sample by~~
8 ~~capturing an image of the sample, based on the information on the defect developed on~~
9 ~~the sample and detected by the inspection apparatus~~

10 ~~locating the defect on the defective sample image by comparing the~~
11 ~~reference sample image and the defective sample image;~~

12 ~~capturing a magnified view of the local area where the located defect~~
13 ~~exists within the area whose view has been captured as the defective sample image, thus~~
14 ~~acquiring a magnified image of the defect;~~

15 erasing ~~the~~ a background from the magnified image of the located defect;
16 and
17 ~~displaying on a screen the magnified image of the defect from where the~~
18 ~~background has been erased.~~

1 11. (Currently amended) Sample observation method according to
2 any one of claims 8, 9, and 10, ~~characterized in that~~ wherein the reference sample image
3 and the defective sample images are the images of the sample captured in secondary
4 electrons ~~reflected~~ emanated from the sample ~~irradiated with~~ by irradiation of a charged
5 particle beams beam.

1 12. (Currently amended) ~~Sample observation equipment intended~~ An
2 apparatus for observing samples, ~~characterized by~~ comprising:
3 image pickup means ~~to capture a view of a sample, thus for~~ acquiring an
4 image of ~~the~~ a sample;
5 storage means ~~to receive and store data about a desired~~ information of an
6 area ~~of to be observed on the sample, the view of the area to be captured by the image~~
7 pickup means, ~~from the external;~~
8 a position control means controller to control ~~the~~ a position of the sample
9 ~~toward with respect to~~ the image pickup means, based on the data about the desired area
10 ~~of the sample information stored into in~~ the storage means;
11 display means to display images of the sample acquired by ~~being captured~~
12 ~~by the image pickup means; and~~
13 arithmetic control means to locate a defect on the sample by comparing a
14 plurality of images of the sample ~~zoomed in by first scale factor and~~ captured by the
15 image pickup means at a first scale factor after the sample is positioned by the position
16 ~~control means controller and make the display means display an image of the defect~~
17 ~~zoomed in by second scale factor that is larger than the first scale factor, together with an~~
18 ~~image including the defect captured at the first scale factor~~ to control the image pickup

19 means to acquire the located defect image at a second scale factor greater than the first
20 scale factor without changing the position of the sample.

1 13. (Currently amended) ~~Sample observation equipment intended~~ An
2 apparatus for observing samples, ~~characterized by comprising:~~

3 storage means to ~~receive and store the information on a defect developed~~
4 on a sample ~~acquired through inspection with~~ detected by an external defect inspection
5 apparatus ~~from the defect inspection apparatus;~~

6 image pickup means to ~~capture a view of the sample, thus for~~ acquiring an
7 image of the sample;

8 position control means to control ~~the~~ a position of the sample, based on the
9 information ~~on the defect developed on the sample stored into~~ in the storage means;

10 defect locating means to locate the defect by comparing an image of the
11 sample not including the defect and an image of the sample including the defect,
12 ~~zoomed in by first scale factor and captured~~ wherein both of the images are acquired at a
13 first scale factor by the image pickup means after the sample is positioned by the position
14 control means, ~~and display the image including the defect on a screen; and~~

15 ~~magnified defect display means to display a magnified~~ an image of the
16 defect located by the defect locating means, ~~the image and~~ captured by the image pickup
17 means at a second scale factor that is ~~larger~~ greater than the first scale factor without
18 changing the position of the sample.

1 14. (Currently amended) ~~Sample observation equipment intended~~ An
2 apparatus for observing samples, ~~characterized by comprising:~~

3 image pickup means to ~~capture a view of a sample, thus for~~ acquiring an
4 image of the sample;

5 position control means to control ~~the~~ a position of the sample so that a
6 defect on the sample will fall within the field of view of the image pickup means, based
7 on ~~the information on the defect on the sample acquired through inspection with~~ detected
8 by an external defect inspection apparatus;

8,
cont

9 defect locating means to locate the defect by comparing an image of the
10 sample not including the defect and an image of the sample including the defect,
11 ~~zoomed in by first scale factor and captured~~ wherein both of the images are acquired by
12 the image pickup means at a first scale factor after the sample is positioned by the
13 position control means, ~~and display on a screen the image of the sample including the~~
14 ~~defect thus located;~~ and
15 ~~magnified defect display means to display a magnified~~ an image of a local
16 ~~area of the sample corresponding to the location of the defect on the image of the sample~~
17 ~~including the defect displayed on the screen of~~ located by the defect locating means, the
18 ~~image and captured by the image pickup means at a second scale factor that is larger~~
19 greater than the first scale factor without changing the position of the sample.

1 15. (Currently amended) Sample observation equipment according to
2 any one of claims 12, 13, and 14; ~~characterized in that~~ wherein the image pickup means
3 is a scanning electron microscope.

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1 16. (New) Sample observation method according to claim 8, further
2 comprising steps of:
3 moving the sample to acquire a magnified image of the reference sample
4 with the imager;
5 acquiring a magnified image of the reference sample at the second scale
6 factor with the imager; and
7 displaying the magnified image of the reference sample on the screen with
8 the magnified image of the located defect.

- 1 17. (New) Sample observation method according to claim 9, further
2 comprising steps of:
3 moving the sample to acquire a magnified image of the reference sample
4 with the imager;
5 acquiring a magnified image of the reference sample at the second scale
6 factor with the imager; and
7 displaying the magnified image of the reference sample on the screen with
8 the magnified image of the located defect.
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